

API WELDING PROCEDURE SPECIFICATION

WPS: _____ REV. NO.: _____ PROCESS: _____ DATE: _____

API-1104 QUALIFIED PRANGES

Diameter: _____ Filler Metal Group: _____

Thickness: _____ Joint Type: _____

Material: _____

Position's: Fixed: ☐ Rolled: ☐ Progression: _____

NOTE: This WPS shall be used in conjunction with the applicable sections of the LANL General Welding Standard (GWS).

WELD JOINT: Type: _____ Class: _____

Joint Description: _____

Sketch Number: _____

FILLER MATERIALS: API Group No.: _____ AWS Class: _____

SFA Class: _____ F No.: _____ Sizes (s): _____

Number of Beads: _____

BASE MATERIALS: Spec: _____ to Spec: _____

Thickness Welded: _____ to _____

Pipe Diameter: _____ to Pipe Diameter _____

ASME P No.: _____ Group: _____ to P No.: _____ Group: _____

POSITIONS: Fixed: ☐ Rolled: ☐ PWHT: Time at °F.: _____

Progression: _____ Temperature Range °F: _____

PREHEAT: Minimum Temp ° F: _____ GAS: Shielding: _____ Backing: _____

Composition: _____

Flow Rate: _____ CFH

ELECTRICAL CHARACTERISTICS: _____

Current: _____ Polarity: _____ RANGES Amps: _____

Transfer Mode: _____ WFS/IPM: _____ Volts: _____

Electrode size and Type _____ Travel/IPM _____

MAX. TIME BETWEEN PASSES: _____

WPS No.: _____ Rev. No.: _____ Date: _____

WELDING TECHNIQUE

Line-Up Clamp: _____

Stringer (S) or Weave (W) Bead: _____ Single Pass _____ Multi Pass _____

Cleaning and/or Grinding: _____

PROCEDURE QUALIFIED FOR: Charpy V Notch ☐ NDTT ☐ D.T. ☐

Maximum K/J Heat Input: _____

JOINT SKETCH AND BEAD NUMBER AND SEQUENCE

NOTE: Weld layers are representative only — actual number of passes and layer sequence may vary due to variation in joint design, thickness and fit-up.

TYPICAL WELDING PARAMETERS

| Pass Number | Filler/ Electrode | Size | AMPS | VOLTS | Travel Speed | Other |
|-------------|----------------------|------|------|-------|--------------|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____